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ABSTRACT

Engaging students seriously in their own academic learning is a persistent difficulty for teachers. The goal of this action research project was to actively involve elementary school students in their learning. The program was implemented at three elementary schools in northern Illinois serving multicultural populations; special education students, some in a Regular Education Initiative (REI) program; and students from a wide range of socioeconomic levels. Targeted classrooms at the three schools were a first-grade REI class at School 1, a fifth-grade class at School 2, and two multiage special education classes at School 3. Lack of student engagement was documented through student interviews, surveys, and teacher journal entries. Children lacked interest in school, felt no responsibility for their own education, or had a poor view of themselves as learners. Parents and students had unrealistic expectations that, in combination with socioeconomic and cultural considerations, a static curriculum, lack of student empowerment, and ineffective teaching methods permitted students to be passive learners. The program involved cooperative learning in mathematics, science, and language arts; goal setting taught through modeling and guided practice; and the alternative assessment technique of teacher-student conferences and self-assessment. The program was implemented in the 1995-96 school year. To assess the effects of the intervention, anecdotal records of teacher observations, surveys, questionnaires, student journals, and portfolios were maintained. Post intervention data indicated increased student engagement, goal-setting, and reflectivity. (Sixteen appendices detail data collection forms, evaluation forms, and sample lessons. Contains 41 references.) (KDFB)

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# IMPROVING STUDENT ENGAGEMENT IN LEARNING ACTIVITIES

by

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Raymond Ellis School
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Action Research Project
Site: Lincolnshire, Illinois
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## Abstract

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Date: May 1996

Title: Improving Student Engagement in Learning Activities

This study describes a program for actively involving elementary students in their learning. The targeted population consisted of regular and special education elementary students from demographically diverse communities located in northern Illinois. The lack of student engagement posed a problem documented by data gathered through student interviews, surveys, and teacher journal entries.

Analysis of probable cause data revealed that the components contributing to the detached approach of students to the learning environment involved motivation. A review of the data revealed that parents and students had unrealistic expectations that, with the socioeconomic and cultural considerations, impacted student educational involvement. A look at traditional school elements indicated that a static curriculum, lack of student empowerment, and ineffective teaching methods permitted students to be passive learners.

To enhance student engagement, experts in the field suggested several possible solutions that would be appropriate for all the targeted classrooms. The chosen solution strategies encompassed cooperative learning, goal-setting, and alternative assessment.

Post intervention data indicated an increase of student engagement in learning. The students became reflective, as they learned to set goals and to determine whether or not the goals were met.

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# Chapter 1

# PROBLEM STATEMENT AND CONTEXT

## Problem Statement

The students of the targeted elementary populations exhibit a lack of engagement in their own learning. Evidence for the existence of this problem includes parent questionnaires, student interviews and surveys, and teacher journal entries that contain anecdotal records and teacher observations.

## Immediate Problem Context

This action research project takes place in three separate schools that are in geographic proximity in the Northern part of a Mid-Western state. The schools and communities will be identified as A, B, and C.

## Immediate Problem Context: School A

School A is a first through sixth-grade facility. The original structure, which was built in 1957, housed 200 students. It is now the first and second grade wing. A two-room addition was constructed in 1967. The latest addition was completed and tripled the available room in 1972. Most of the floors are tiled with the exception of the library, music room, and the first grade classes

which are carpeted. The office, music room, and teachers' lounge are the only air-conditioned areas. Most of the classrooms have windows to open for ventilation, except for eight interior classrooms that have no windows.

School A's total enrollment is 758 pupils. Approximately 71 percent of the students are Caucasian, 25 percent are Mexican-American, 2 percent are African-American and 2 percent are Asian/Pacific Islanders.

The attendance rate is 96 percent and the school has a low rate of chronic truancy. Forty-six percent of the students are from families of low income, and 29 percent of the students have limited English proficiency.

In addition to the principal, (who joined the faculty in the fall of 1995), there are 54 staff members. Twenty-four are regular classroom teachers. Of these, six teachers team-teach at each grade level with one of the four special education teachers in a Regular Education Initiative (REI) program. (The first grade classroom, of a first and second grade REI setting, has been targeted for the research.) There are six teachers in self-contained bilingual classes, and there is one teacher for music and one for physical education (PE). Both music and PE are scheduled for 20 minutes twice a week. Band and chorus are electives. Support personnel constitute the balance of the staff. They include seven teaching assistants, a speech therapist, a social worker, a librarian, a reading recovery teacher, a Chapter One reading teacher, a behavior therapist, a teacher for gifted students, and an English As a Second Language (ESL) teacher.

The Surrounding Community: School A

Community A is a kindergarten-high school unit district of 4,800 students. The teacher-pupil ratio is 25:1 with an annual operating expenditure per pupil of $4, 517 (State School Report, 1993).

Each of the six elementary buildings, as well as the middle school and high school, have site-based management. The superintendent and the assistant superintendent started working for the district in 1992. Recently, differences between the school board, administrators, and the teachers resulted in a lengthy strike which divided the community.

The average teacher salary for the 1992/93 school year was $38,139, and the average administrator salary was $60,635. Fifty-six percent of the teachers have master degrees and above.

Of the 16,464 residents, 59 percent are high school graduates. Slightly more than half, 53 percent, are employed in blue collar occupations. The median family income is $39,354, while the median home value is almost double that amount at $73,200.

Most of the population, about 83 percent, is Caucasian. At 14 percent in 1990, the Mexican-American population appears to be growing as indicated by increasing enrollment in the schools. The African-American and Asian residents each comprise about one percent of the population (Upclose Illinois, 1993).

Immediate Problem Context: School B

The ethnic background of the school population is as follows: 95 percent Caucasian, 2 percent African-American, 2 percent Asian, and 1 percent Mexican-American. The low income population within

the district is two percent and the limited English proficient population is one percent. Attendance rates are 95 percent, and there is no chronic truancy problem. Student transiency is five percent.

There are approximately 50 teachers in School B with a substantial support staff. There are special education teachers and two certified assistants at each grade level. The special education model used is the Regular Education Initiative (REI). A social worker is assigned to the building as well as a Chapter One teacher who teaches both math and reading. There is a Dean of Students who teaches as well. Staff members in the district have an average of 18 years of teaching experience. Sixty-six percent have master degrees or above. The average teacher salary is $50,354. The average administrator salary is $100,891 (State School Report, 1994).

At the fifth through eighth-grade building there are 418 students. This school has six each of the fifth and sixth-grade classrooms. The seventh and eighth grades are divided by subject. There are five teachers for each subject per grade level, not taking into consideration the art, music, PE, and two foreign language teachers. Fifth and sixth grade teachers team-teach so as to give their students the benefits of their expertise. Both grade levels assign many projects and offer at least one program where parents are invited to view their accomplishments. The academic programs at School B are challenging and diverse. A variety of teaching methods are used, from cooperative learning, to direct instruction, to individualized learning. This school feeds into one of the most recognized high schools in the country.

In addition to the fine academic programs, the school has many special programs. All grades participate in an advisory program that deals with emotional and maturation issues of the students. Each advisory selects a service project to which they devote class time throughout the year. There are many clubs and extracurricular activities sponsored by the school, in which the students can voluntarily participate. Each year, the junior high project sponsors a play with the professionalism of a college production. Professional directors and sets are obtained to add to the experience of the production. The Cultural Arts Program, sponsored by the Parent Teacher Association (PTA), brings various performers to the school, and the PTA also organizes field trips.

The Surrounding Community: School B

In this elementary district of 1,040 students, the teacher to pupil ratio is 16:1. The annual operating expenditure per pupil is $9,194 (State School Report, 1994).

There is a seven member board of education for the district's three age-centered schools. One school houses kindergarten through second grade, another has third and fourth grade, and the final school houses fifth through eighth grade.

A recent bond issue failed by less than 40 votes. The tax increase was intended to be used for expanding the existing buildings for additional students. The student population has been rising steadily over the past years. Additional expansion is anticipated, and the district is trying to be pro-active and add to the buildings prior to increases in student enrollment.

The community has a total population of 8,500. Sixty-nine percent are over 25 years of age, and 75 percent are college graduates. The racial/ethnic demographics are as follows: 93 percent Caucasian, 3 percent African-American, 2 percent Asian, and 1 percent Mexican-American. The total white collar population is 93 percent. The median family income is $125,000 and the median home value is $427,000 (Upclose Illinois, 1993).

Immediate Problem Context: School C

School C is a kindergarten through fifth-grade facility serving 684 students. Ninety percent of the students are Caucasian, six percent are Asian/Pacific Islanders, two percent are Mexican-American, and one percent is African-American. There is a low income population of approximately three percent and a limited English proficient population around three percent.

There are 25 regular classrooms with an average class size of 24. The school's attendance rate is 96 percent with a student mobility rate of 13 percent and a truancy rate of zero percent.

The total number of staff, including the principal and assistant principal, is 66. Twenty-nine are classroom teachers; five are specials (art, music, physical education, library); 30 are support staff (Learning Disabled resource teachers, and those for occupational therapy, speech therapy, nursing, psychology, gifted, social work, ESL, adaptive physical education, and teaching assistants). Four teachers have self-contained special education classes. These classes include Learning Disabled (LD), Educable Mentally Handicapped (EMH), Trainable Mentally Handicapped (TMH), and Behavior Disordered (BD) students. The staff has an average of 14 years of

teaching experience. Sixty-seven percent of the staff have master degrees and above.

The air-conditioned, carpeted, 25 year-old building was originally built as a junior high. The open classroom style has been redesigned as a kindergarten through fifth-grade facility. Despite renovations to the rest of the building, the special education pod still retains the open classroom atmosphere. This creates a noisy environment that is very distracting to the special students in these classrooms. Traditionally, schools meet the needs of local students, but the self-contained special education classes in this building are part of a county cooperative that serves students from several neighboring communities. (See Table 1.)

Two cross-categorical classes, consisting of seven through eleven year-old LD and EMH students, are the targeted population for this study. In contrast to the regular education program, the special education students of this cooperative have individualized educational plans (IEP's) which focus on identified deficit areas. The students are mainstreamed with their regular education peers in art, music, and PE. In accordance with their IEP goals, some students are also mainstreamed in academic areas.

The Surrounding Community: School C

The School C district has four kindergarten through fifth-grade buildings and one sixth through eighth-grade junior high. The total enrollment is 2,395 students. The teacher-pupil ratio is approximately 22:1 with an annual operating expenditure for each student of $6,149.

Table 1. below shows pertinent demographic information pertaining to the nine different communities which constitute the population of the two self-contained special education classrooms of School C.

Table 1.

Socio-Economic Indicators

| Community | Median Family FYI Income | % White Collar | % College Graduate | % High School Graduate | Median Home Value |
|---|---|---|---|---|---|
| 1 | $41,895 | 60 | 21 | 58 | $104,400 |
| 2 | $62,126 | 83 | 54 | 40 | $163,600 |
| 3 | $50,302 | 70 | 38 | 51 | $111,600 |
| 4 | $55,450 | 76 | 47 | 44 | $131,600 |
| 5 | $61,146 | 77 | 47 | 46 | $161,200 |
| 6 | $70,397 | 82 | 54 | 38 | $186,500 |
| 7 | $49,538 | 65 | 37 | 49 | $115,900 |
| 8 | $39,354 | 47 | 14 | 60 | $ 73,200 |
| 9 | $54,426 | 78 | 48 | 44 | $140,500 |

As the Table indicates, the nine sending communities represent a diverse group (Upclose Illinois, 1993).

The county cooperative for the special education students receives funding from a number of sources. These include tuition, contractual service fees, state reimbursement, state grants, and federal reimbursement. The money allocated per student ($11,882.00) is the average cost of tuition for various programs.

The administration for the cooperative consists of a superintendent, an assistant superintendent, and the governing board which is comprised of one delegate from each of the 37 districts served by the cooperative. This board delegates authority to the management council. The council, (five district superintendents and two governing board members), handles day-to-day operations. While the cooperative's administration is located elsewhere in the county, the district's administrative offices, for the seven member school board, are located in the kindergarten through fifth-grade building of this study. The district's average teacher salary is $47,522 and the average administrator salary is $78,163 (State School Report, 1994).

Of the 19,174 residents, 54 percent have college or post graduate degrees. Approximately 82 percent are employed in white collar occupations. The median family income is $70,397, while the median home value is $188,500. The majority of the population (94 percent) is Caucasian, 3 percent are Asian/Pacific Islander, 2 percent are Mexican-American, and less than 1 percent is African-American (Upclose Illinois, 1993).

## Regional and National Context of Problem

Students' lack of engagement in their own learning has generated concern at the state and national levels. When students

are faced with situations that demand thinking, teachers too often see an "I can't" attitude, which is less demanding than the pursuit of knowledge. Many students avoid doing anything more than necessary or may do nothing (Bacon, 1990; Costa, 1992).

To engage the learner, students must see the importance of their educational goals. They cannot do this without opportunities to review their learning, not only to develop a wider range of skills, but also to assume a sense of responsibility for their learning (White, Blythe, & Gardner, 1992; De Fina, 1992).

Students seem to be more engaged in activities such as cooperative learning, but increased participation is not enough. For example, students may play or participate in a game, but that doesn't mean they are interested in any learning that may occur (Newmann & Wehlage, 1993). Engaging students in serious academic school work is a persistent difficulty for teachers as reported across the nation and at the targeted schools (Newmann, 1992).

## Chapter 2

## PROBLEM EVIDENCE AND PROBABLE CAUSE

### Problem Evidence

Student engagement has been documented at the three targeted schools by administering surveys to students and questionnaires to parents, by having the children self-assess, by conducting student interviews and through the teachers' anecdotal records and behavioral checklists. The information was collected over the first five weeks of school and yielded interesting results.

### School A

The results from the student survey in the targeted first grade class indicated that 60 percent of the students like school most of the time. The parents agreed with the children at 79 percent. Fifty-two percent of the students feel that they discuss school and school activities, but a surprising seventy-nine percent of the parents said that their children discussed school with them always or often. On the other hand, sixty-eight percent of the students believe they bring papers home from school regularly, but only forty-seven percent of their parents felt that they brought papers home from school.

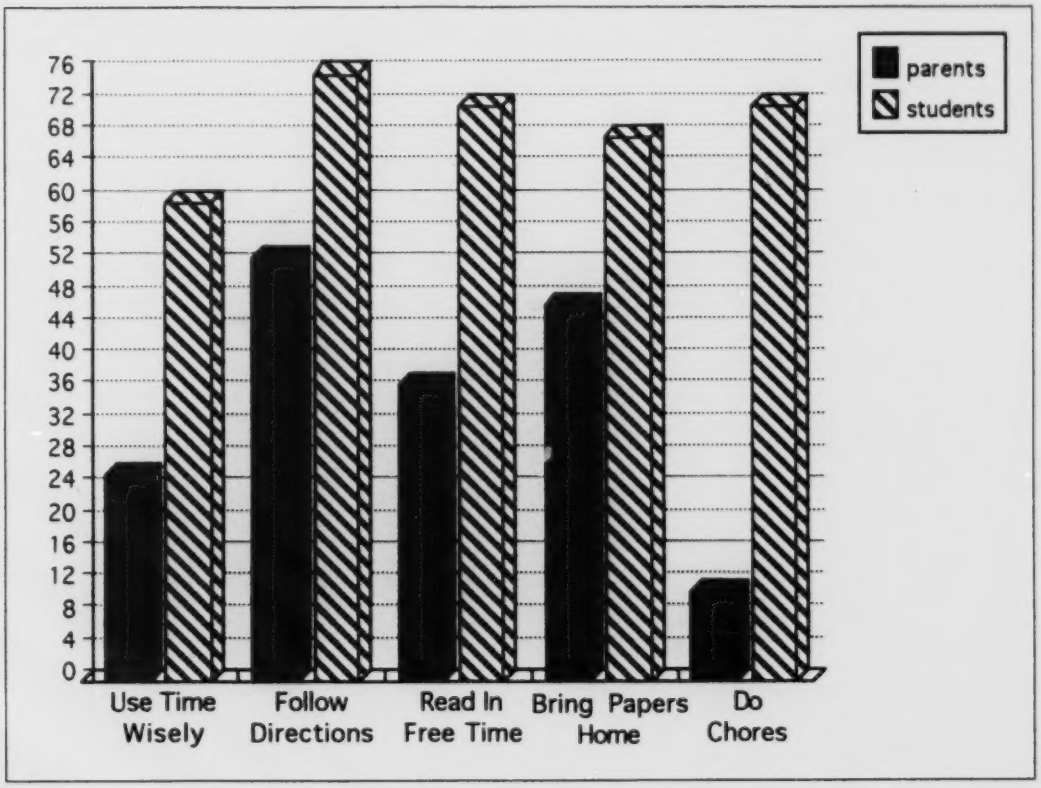
The parents' responses were also more negative than students' responses on responsibility issues such as using time wisely,

following directions, reading during free time, and doing chores without being reminded. The students' responses to these questions not only disagreed with the parents' responses, but strongly disagreed. (See Table 2.)

Table 2

A Comparison of Student/Parent Responses

To Questions Dealing With Responsibility




Two areas show dramatic disagreement between students and parents. On the question of doing chores without being reminded to

do them, 72 percent of the students indicated that they always or often do their chores. Only eleven percent of the parents said that their children often do the chores without reminders. None said their child always did them without reminders. When asked about reading in their free time, 72 percent of the students said they always or often read, but only 37 percent of their parents agreed. The other areas also show a disparity between the parents' and students' responses.

Many of the same students who were unable to answer the survey questions realistically, were also unable to self-assess their abilities with any accuracy when given questions during interviews or when observed in the classroom by the teacher. They would either over or understate their performance in school.

One group of students knew how to look at their own behavior and abilities they also could indicate areas of strength as well as areas of weakness. They seemed comfortable with themselves, knew they were still growing and learning, and they had ideas about what to do to improve.

Another group of students had difficulty naming any areas of competence at school. They were not sure what to work on or how to improve. The answer most often given to a question was "I don't know." This response came almost before a question was fully asked, as though they felt they would not know any answer, or there was no response at all, whichever was the safest route. Even assuring them that the questions had no "right" answers didn't help. When they were observed working in cooperative groups, they were less involved and allowed others to make the decisions for the group.

These students participate and volunteer less in classroom discussions as well.

The last group of students believes that their abilities and efforts are always their best. When asked what they had difficulty with, these students had a hard time deciding on something. When asked to complete goal-related rubrics, either individually or with a cooperative group, they always rated themselves at the highest point even when they or the group didn't complete the goal. When these students work in cooperative groups, they try to dominate the group.

Conclusions: As early as first grade, children have images of themselves as learners. Whether this is because of early childhood experiences in school or home experiences, it is clear that students need opportunities to set attainable, short-term, realistic goals with opportunities to evaluate and reflect on their progress.

Students with low-esteem need to have their successes identified for them so they can go on to new goals and learning. Overconfident students need to have realistic achievements identified for them and guidance in looking at learning as a lifelong, ongoing process. These students also need to learn to set new goals for themselves and ways to determine how effectively the goals have been met. Involving students in goal-setting, evaluation and reflection is important to all students.

School B

Student engagement has been documented in a fifth grade class at School B by administering surveys to students and parents, having the children self-assess, conducting student interviews, and by the

teacher keeping an anecdotal record as well as a behavioral checklist. The information was collected over the first five weeks of school and yielded interesting results.

The results from the student survey indicated students are overall less than enthusiastic about attending school and have an aversion to doing homework, but they say they rarely need help with the homework they so much dislike. Additionally, they do not enjoy reading or writing. Results from the parent survey were somewhat contradictory. Parents believe students enjoy going to school, and that they consistently need help with their homework. Both parties agreed that reading and writing are not much enjoyed in the students' free time.

When the children self-assessed they fell into three categories: those who realistically assess their own knowledge and/or ability, those who underestimate their ability, and those who overestimate their ability. Student interviews revealed the same information. When asked what they would like to improve, approximately 40 percent were realistic and indicated appropriate goals for themselves and appropriate weaknesses. The 35 percent of the students who underestimated their ability felt they had definite areas to improve but felt improvement was hopeless. Part of the reason for their hopelessness may be due to feeling that so many areas are lacking. When listing areas of achievement, they indicated they were good at art or physical education. The students who overestimated their ability, 25 percent of the class, chose for improvement seemingly inconsequential areas like handwriting or talking in class. When asked what they did well they listed every subject.

The anecdotal record and behavioral checklist revealed that 25 percent of the children believe they haven't excelled in the past; consequently, they will do no better in the future. Often, one poor grade will lead them to generalize that they are terrible in that subject. In group work these students tend to be passive and let others make decisions for them. In class discussions they participate less and with less confidence. These students may reflect the students who do not enjoy school; yet, their parents are unaware of their feelings.

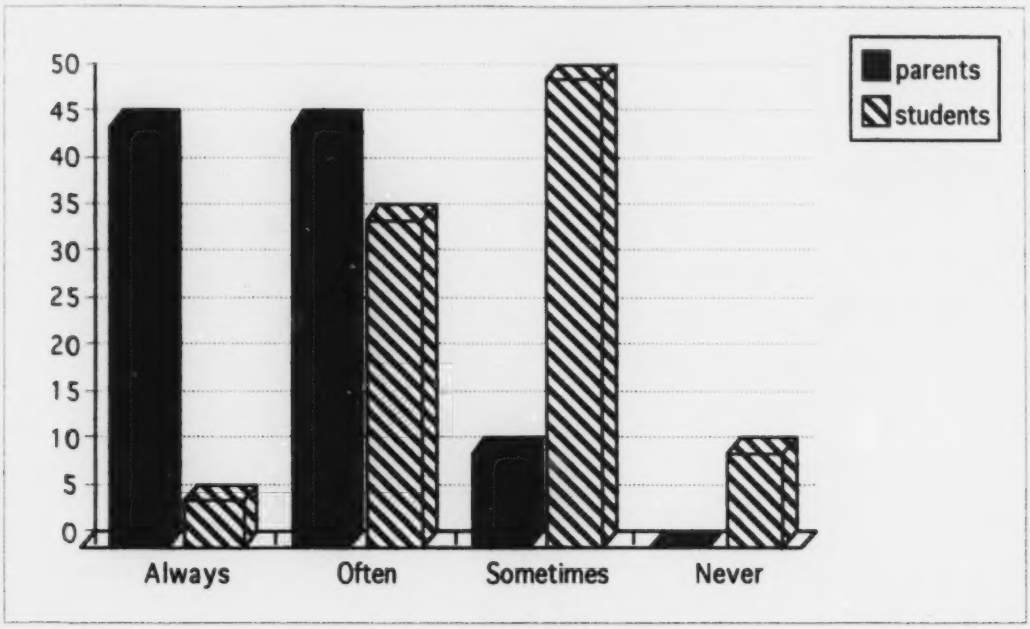
On the other side of the spectrum, some students have great difficulty when working with their peers. They feel their way is the right way, and they have all of the answers. When they are corrected or asked to listen to other students they become abusive and/or aggressive. When the teacher makes a suggestion, they often shut down, unable to positively respond to constructive inputs. Class discussions also indicate their confidence as they try to lead the discussions and make fun of others' comments.

Conclusions: Many factors lead a fifth grader into liking school or dreading attendance. It is obvious that the parents' perceptions of their children enjoying school, against the reality of children not wanting to go to school, clearly show that parents are projecting their feelings onto their children. (See Table 3.)

Table 3

A Comparison of Student/Parent Attitudes

To the Question of Attending School




The table above shows the differences in the students' attitudes to school as compared to how the parents believe their children feel about school. In all categories, the parents believe their children like school more than what the students indicated.

Students aren't always motivated to learn, either because they are not interested, or they feel they are already experts on the topic. Additionally, when they feel they have no choice in how material is presented or how it will be assessed, they may consequently feel the teacher is merely looking for their weaknesses. Other students feel they will be awarded an "A" regardless of the product. Students spend little time reflecting on what they learned or what they want to learn. Students need to become more objective about their

abilities and to take a more responsible role toward their education; then, perhaps they will be more engaged.

School C

The results from the student survey administered to the two multi-age special education classes of School C indicated that only 56 percent of the students like to come to school and only 50 percent of the students ever discuss or share school activities with their families. In contrast, the parent survey indicated that 92 percent of parents thought their special needs children liked to come to school activities. Parents over-estimated their children's desire to come to school, but were very aware of their resistance to share and discuss school activities.

Student surveys also revealed that 53 percent sometimes or never read or try to use new words. An overwhelming 88 percent indicated that they sometimes or never ask to go to the library. Parents' responses showed a strong correlation with 83 percent of them stating that their children sometimes, or never, read in their free time, 50 percent never try to use new words, and 75 percent only sometimes or never ask to go to the library.

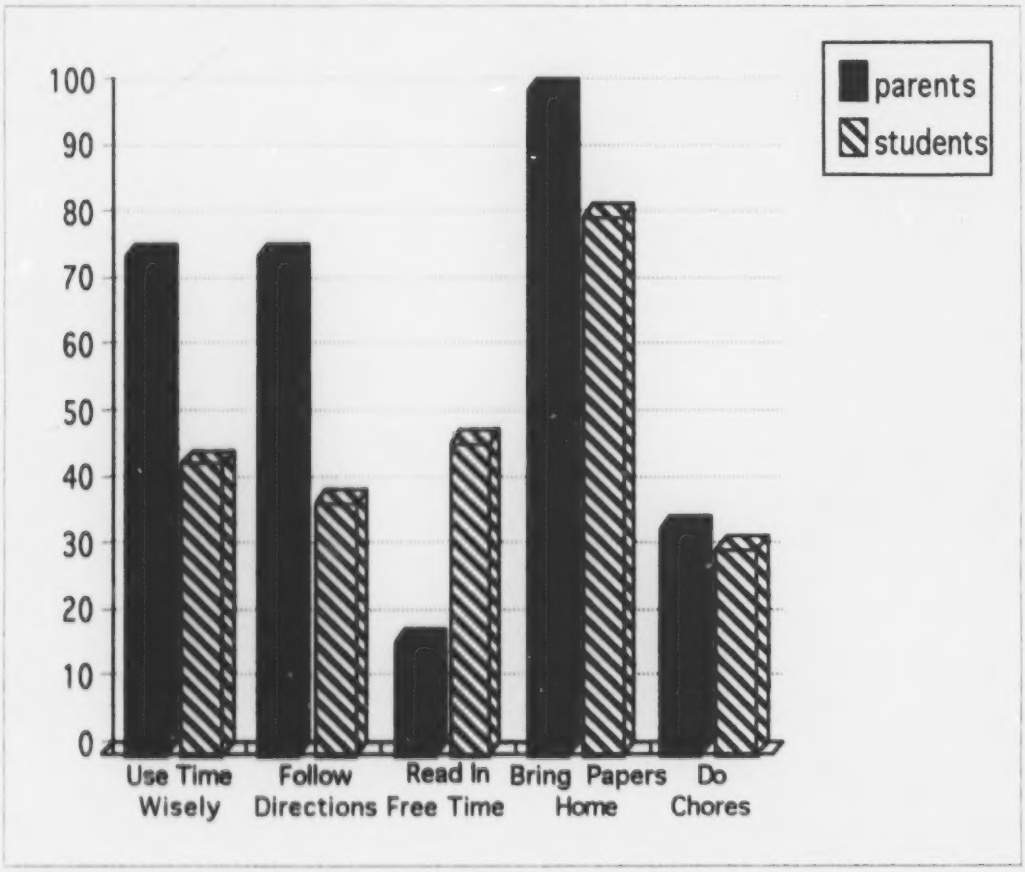
On issues of responsibility, such as using time wisely and following directions, 75 percent of the parents indicated positive responses, but less than half of the students agreed. The responses were more in agreement on questions relating to chores. For example, 44 percent of the students stated that they sometimes or never have daily chores. Thirty-one percent of the students stated that they do their chores without reminders. Parents stated that 58

percent of the students are assigned daily chores and 34 percent did those chores without reminders. (See Table 4.)

Table 4

A Comparison of Student/Parent Responses

To Questions Dealing With Responsibility




These statistics seem to indicate that the students' and parents' perceptions are far apart. The parents believe their children

are more capable than the children feel they are. The responses from the parents were surprising. During annual reviews, the parents project an entirely different view of their children. In academic areas the parents often feel their children are less able to achieve.

Student interviews revealed unrealistic responses substantiating that they exhibit an inability to self-assess their strengths and weaknesses. A number of those same students were also unable to self-assess their abilities when observed by the classroom teacher. Sixty percent of the students over-estimated their strengths and a number of students said that what they were good at was the same subject with which they were having trouble.

The majority of student interviews revealed that students had little, if any, concept of their strengths and weaknesses, or what to do to improve them. Only 56 percent of the students felt that they were doing their best work. When interviewed as to what areas were difficult for them, 60 percent were not engaged enough in their learning to differentiate between what they felt they were good at and what was a deficit area.

During interviews, students exhibiting behavioral problems realistically targeted their behavior as an area with which they were having difficulty. They were, however, unrealistic in assessing their strengths in the area of academics. Perhaps, if these students were more actively engaged in their learning of academics, their behavior problems would be less of an issue. For example, one student recognized that he was having difficulty by hitting and kicking other students. True! He stated that math and spelling were subjects he was good at, while records state these subjects are a

high priority deficit area. Finally, he could think of nothing at all he needed to improve.

Conclusions: A large disparity exists between the expectations of students, parents, and teachers. Perhaps the overprotection and low expectations on the part of the parents may be attributed to the fact that these children have special needs. Parent expectations carry over to the students. Due to lower parent expectations, students have not been motivated to learn responsibility.

It is not only students and parents who have low expectations. Experience has revealed that other school personnel who have frequent contact with special needs students also have low expectations for these children. They treat them as though they are less capable than they are, thus discouraging them from developing to their full potential.

Neither parents nor students realistically assess strengths or weaknesses, nor do they set attainable goals for academic and social progress. Teachers need to help identify realistic behavioral and academic objectives, along with methods to assess whether or not the goals have been met.

Goal-setting, evaluation and reflection can be motivating. They can lead both students and parents to become engaged in the life-long process of learning that motivates even special needs students to aim for their full potential.

In looking back over the data-gathering and results, it is noted that all three targeted schools have an issue with student engagement. There are indications that the children may have a lack of interest in school, may feel no responsibility toward their own education, and/or may have a poor view of themselves as learners.

Students need to buy into the importance of education and the benefits of learning. Often they may have to overcome their home situations, parental expectations and their limited abilities. The issue is real and may stem from one or many causes, which will be explored further in the ensuing pages.

Probable Causes

Examining the data from the targeted sites and probable cause data from the literature, it appears that the problem of student passivity may be related more to home variables than to those at school. However, because much has been written about the school's responsibility in engaging the learner, it would be impossible not to look at the school as a possible cause for the problem of student passivity.

Looking first at the home, we know that the students are coming from very different home and economic situations. What is interesting is that regardless of how much or how little money or education parents have, children will achieve at a higher level than their parents and are better adjusted socially when their families are interested in their education (Kober, 1992). When this interest generates realistic academic expectations, a student is motivated to learn. When parents are too demanding or when they have unrealistic views of their child's ability (either too high or too low) they may interfere with the student's learning. Expectations of parents of handicapped children must also be realistic and within the children's capabilities. Some parents are over-protective of a special needs child, while others may expect more than the child is able to do. In either case, the attitudes of the parents will influence how their

children perform. According to Kober (1992) there is a direct link between attitude and student achievement at all levels.

Another cause of students who are unwilling to become engaged in their learning is the fear of failure. This fear of failure may occur because a child is responding to a parent's or sibling's academic past. If it is the parents' belief that they were not good students, or if any of their other children had problems in school, they may feel that the next child will not be successful either. If this is communicated to the child, even inadvertently, it's as though they are giving that child permission to fail. When parents impart their own fears about school and education, children's expectations about their own ability may suffer. Students may then be part of a self-fulfilling prophecy of failure (Woolfolk, 1990). On the other hand, the feeling of failure may be because of a child's own school history. Students need to believe that they have a chance of being successful in order to be motivated (Serna, 1989). If children feel that they cannot live up to expectations that are too high, they may not try at all. Or, if children have already had many failures in school, they may believe that they are unable to succeed. Students need to believe they have a chance of being successful in order to be motivated. Feelings of inadequacy, whether from parental influence or personal experiences of failure, have a tremendous impact on learning.

Much has been written about the changing family structure in America. In homes that have a traditional two-parent family, both parents may now work outside of the home. However, since divorce has become more commonplace in all segments of society, many children live with only one parent. When parents share custody, the

children may have to go back and forth between parents. When parents remarry, children need to make further adjustments. Other areas of concern that can be related to student passivity are the increases in domestic violence, homelessness, child abuse, neglect, hunger (It's Elementary, 1992; Crosby, 1993). This leads us to ask if the student's basic needs have been met. Is the student coming to school hungry or tired? Many students come to school without breakfast or an appropriate breakfast. Children who are malnourished or consume diets that are nutritionally inadequate demonstrate behaviors such as shortened attention spans, poor motor skills, and a lack of motivation (It's Elementary, 1992; Bell, 1993). As indicated by the free lunch programs (in some schools, free breakfast programs) being offered in our nation's schools, hunger is a valid concern. The increased need for these programs is supported by the evidence of an increase of low-income families in our communities (Upclose, 1993).

In addition to the problem of student hunger, there is also the problem of students who come to school too tired to think or work. This may occur when low-income families have limited space in the home and children have to double-up at bedtime. There may be infants or very small children in the same bedroom disrupting the sleep of the other children. Sleep problems also occur as a result of emotional turmoil, and that turmoil may arise from any of the family variables previously mentioned (Crosby, 1993). As early as 1949, Tyler recognized that a lack of basic needs may impede student motivation. This was further detailed by Maslow in his hierarchy of needs (Woolfolk, 1990).

When you look at the increase of low-income families you can see that the gap between the "haves" and the "have-nots" has grown tremendously in recent years. Various studies suggest that students may fail to succeed in school because of what they have lacked in their early life experiences like exposure to print outside of school, family support for education, or even trips to museums or zoos (Kober, 1992; Means & Knapp, 1991).

Another problem is that there may be too many outside demands on a student's time which may also interfere with a student's desire to learn. Activities that compete for students' time include brothers and sisters to watch, music or dance lessons, scouts, team and individual sports, and television viewing. When television viewing goes up in excess of ten hours per week, achievement and scores go down (Bacon, 1990; Kober, 1992).

Cultural differences may also affect a student's engagement in learning. There is an increase in the numbers of families of different cultures in the targeted communities and schools as well as across the nation (State School Report, 1993; Upclose Illinois, 1993). Dorning and Garza of The Chicago Tribune (1995) reported that in Illinois alone, 14 percent of the households do not speak English. It is clear that by the year 2000, minorities will constitute roughly 30 percent of American students in our schools. By the year 2020, this proportion will increase to well over 50 percent (Kober, 1992). As society becomes increasingly diversified, we will see more non-English speaking students in our classrooms. According to several sources, (Harris, 1992; Jones & Pierce, 1992; Banks, 1992; Means & Knapp, 1991) these students have a difficult time in the classroom. A disproportionate percentage of them become the

at-risk students in our schools. The most obvious challenge to these students is having to learn a new language at the same time they must master new subject matter.

After looking at the student's home, economic, and cultural background, it is important to look at the school's role when facing a passive learner. While schools have to consider outside influences when planning for their students, they also need to examine the classroom itself because a look at traditional classrooms suggests other causes for the nonmotivated learner. A pre-set curriculum with a prescribed scope of isolated data or discrete skills, a learning sequence of part-to-whole with little connection to the real world, and a prescribed timeline are all characteristics of the traditional classroom (Zemelman, Hyde, & Daniels, 1993; It's Elementary, 1992).

Researchers have reported that students will become engaged in their learning when they have some input into the content or when the curriculum has meaning for them through opportunities to solve problems and situations that deal with real life. Are real life activities encouraged or discouraged because they don't fit into the neat little chunks of time in which educators are told to conduct their lessons? Presently, students are engaged in learning activities only 20 to 30 percent of the time they are in school (Cangelosi, 1988; Kallick, 1992).

As noted by Brooks & Brooks (1993), teachers in traditional classrooms do most of the talking, goal-setting, and evaluating. However, programs that emphasize the social aspects of learning where students interact with other students, not just teacher/student interactions, are more successful (Kober, 1992;

Brooks & Brooks, 1993). Interaction coupled with hands on learning (as opposed to students sitting in relative isolation completing worksheet after worksheet) is highly motivating. While cooperative learning meets this need, particularly for minority students, teachers themselves may be insecure about letting students work in groups because they are hesitant to give up the control of direct instruction. Consequently, students may withdraw and become passive learners (It's Elementary, 1992).

Students need to be allowed to become a partner in setting goals in the classroom. Students will expend effort on tasks at which they believe they will succeed. When they do, they are more engaged. Teachers should have high expectations for all students. They also need to guide students to strive for challenging but attainable tasks. Minority and high-risk students must also feel that the teacher has high expectations for them. Too often, teachers hold lower expectations for these children (Kober, 1992). When students choose goals and the means for achieving them, they will become involved because they will be developing a sense of ownership.

Finally, attainment of the goals has to be evaluated, not just by the teacher, but by the students as well. As stated by Kallick (1992), evaluation must be a collaborative process between student and teacher. The students will be motivated to meet their goals if they help establish the criteria. There should be no surprises. The goals and the criteria for evaluating those goals should be clear and appropriate. Assessment should be ongoing and frequent. At the Annual Staff Development Conference in Gurnee, Illinois in 1995, Wiggins stated that assessment should provide the learner with

specific and meaningful feedback on what was accomplished and what learning still needs to occur. Too often students are not given feedback until the end of a unit of study, too late for any intervention or new learning to occur because of the late feed-back. Brophy (1987) concurs, and he also agrees that the student must also have time to reflect on the learning that has occurred and to establish new goals.

Essentially, the research tells us that the way to involve children in their own learning is possible through the following strategies: using student interest; cooperative learning; hands-on learning; involving the student in goal setting and self-evaluation. While there are many variables teachers cannot control, such factors as the home situation or cultural background, by investing in the areas that are controllable, teachers can help children not only become involved in learning, but also help children become life-long learners.

## Chapter 3

## THE SOLUTION STRATEGY

### Review of the Literature

Engaging students in their own learning is an issue that has been addressed by many in the field of education. Cooperative learning is certainly one of the foremost methods for involving the learner. Not only teachers, but also national professional organizations such as the American Federation of Teachers, National Science Teachers, National Council of Mathematics, and the Association for Supervision and Curriculum Development are calling for the use of cooperative learning along with other challenging tools. By developing a cooperative classroom you will discover a community of students eager to learn (Bellanca & Fogarty, 1991).

As an instructional tool, cooperative learning can be used with any curriculum. Many different skills, from critical and creative thinking skills to social skills, can be taught in cooperative groups. According to Johnson & Johnson (1992), using the cooperative learning model in the classroom increases participation as it assists students in achieving cognitive goals. This model is applicable for all students. Low, average, or high functioning pupils, as well as those from culturally diverse backgrounds, can be successful in cooperative groups. Teachers using cooperative learning often find that it promotes more positive self-concepts and

improves the classroom climate. As students share their perspectives, values, and experiences, the learning becomes dynamic (Meyer, 1992; Banks, 1992).

How do teachers get students involved in their learning when they work in cooperative groups? One key is motivation. The best motivation is student interest. Giving students choices about the content, making it relevant, and showing students how they can transfer their learning to their own lives will bridge the gap between detached participation and active engagement in the experience. When students construct meaning from their own experiences, they are engaged in their learning, and they are more likely to retain the information (Brooks & Brooks, 1993; Gower & Saphier, 1979).

Thinking about real experiences and issues enhances the learning experience making it important and enjoyable to the learner. Woolfolk (1990), reminds us that if the task itself or if the outcome is enjoyable, students are motivated to see the task through to its completion. The tasks may involve paper and pencil activities, using manipulatives to construct, design, or create something, or giving presentations. In 1989, Brown observed that students who have to perform or present their knowledge and skills are active learners, and active learners become lifetime learners.

Additionally, students need opportunities for responsibility within the group. Assigning roles and designing tasks that necessitate individual as well as group accountability further engage the learner. Everyone in the group becomes dependent on everyone else to see that the task is completed. The Johnsons (1992) call that social interdependence.

A natural outgrowth of the cooperative learning experience is the development of group and personal goals, followed by self-assessment and reflection. When students participate in the selection of group or individual goals, and then decide on how to achieve those goals, they develop a sense of success and ownership for their learning (Brooks & Kann, 1993). Research has indicated that students will invest greater effort and persistence if they believe they will succeed in a task. So, while interest in the topic is important in motivation, another factor we must consider is the student's perception of personal competence. A learner must have positive learning experiences with clear outcomes and expectations (Brophy, 1987; Brooks & Brooks, 1993).

In 1989 Serna suggested that students who have a negative reinforcement history need to experience positive reinforcement. These nonmotivated learners often lose sight of the behaviors they are working toward. Too often, these are the students we see in special education classes. Setting and reaching realistic goals can motivate these students so they can begin to establish a history of positive reinforcement. Through their own efforts, learners begin to believe they can succeed.

Costa and Kallick (1992) have stated that the responsibility of setting goals and evaluation should shift from adults to students. When we allow students to choose topics of study, set goals, and self-assess, we are encouraging student empowerment. Then, and only then, will students be partners in their learning experiences and have control over the results as well as the learning (Kallick, 1992; Schwartz, 1991).

This means that teachers will be giving up some of their former control. Traditionally, teachers have made all the decisions for their students. They decided what and how the students should learn (though this may be dictated by the district), the goals, outcomes and methods of evaluation. Therefore, the learner had no investment in the process and lacked the necessary motivation (Bacon, 1991).

Assessing whether or not goals have been met is the next step in involving the learner. Before addressing evaluation tools or strategies that can be used in the classroom, it is important to realize that changes in the way we teach require changes in the way we assess, and that has been addressed as a concern at the state and national level. In 1988, because of needed changes in student assessment methodology, the Illinois State Board of Education issued a guide for developing assessment programs in Illinois schools. An updated version was published in 1995. It is to be used for focusing on improving assessment and student learning, rather than specifics about legislative requirements (Illinois, 1995).

Schools throughout Illinois are being asked by the state to improve curriculum and testing instruments by developing important learner outcomes and the criteria to measure them. Standardized tests of the past are being viewed in a whole new way (Wiggins, 1993; Brown, 1989). This summative kind of evaluation is not enough. We no longer want students to simply sum-up or regurgitate memorized information. We want them to probe, analyze, evaluate. So how do we go about doing formative evaluation to help students recognize, understand, and celebrate growth, and to set goals and further their learning (Madaus & Kellaghan, 1993)?

Teachers need to use a wide range of growth indicators like observational notes, checklists, interviews, questionnaires, artifacts, work samples, evaluation conferences, student self-assessments, and portfolios to get a better understanding of their pupils' learning and needs. It is necessary to use a variety of evaluation tools because this allows students an opportunity to demonstrate their learning in a manner that is the most effective for them (Brooks & Brooks, 1993).

By beginning with simple steps such as hand signals like "thumbs up" for assessing group goals, designing criteria and rubrics, and using learning lists, students can start to understand how to look at their own learning and performance. More refined assessments can then be started through interviews and conferences. Portfolios are a natural tool for the foundation of conferences.

Much has been written about portfolios. Abruscato (1993) felt that the development of the Vermont Portfolio Project focused on helping teachers do better what they want to do anyway, which is, to increase the teacher's and student's knowledge concerning student performance, and to know how to inspire further student growth and learning.

To begin using portfolios in the classroom, important decisions need to be made. What kinds of work will be kept in them? Will they be used for typical work or best work? Will the samples be content specific or an integration of materials across the curriculum? Who will select the pieces to be placed in the portfolio (De Fina, 1992; Burke, 1994)?

Keeping a portfolio can be a powerful visual guide for a student. As stated by White, Blythe, & Gardner (1992), this compilation of materials can indicate the wide range of talents possessed by the student. When this history of their school life is viewed by students, there is the pride of ownership, and they want to share their work with their peers, parents, and teachers. An additional benefit of the sharing is their increased intrapersonal skills and sense of responsibility. They see what they have done well and what still needs to be done (Brown, 1989).

Whenever students are sharing and/or conferencing about their portfolios, the period should be a time to indicate strengths and identify weaknesses as a way to develop a plan for further growth. What needs to be emphasized during a conference is the growth that is occurring, and how that growth can continue. This is important because if students feel that this is only another way of finding out what is wrong, the whole process is counter productive. We want conferences to be valuable to the students who can use them to discuss and clarify their ideas and get ideas and help from others. When used this way conferences become valuable tools for learning. Conferences are not used as a reporting system, but as a participatory intervention strategy to analyze development. Teachers will be the guides for students who need to look at their work in a new way. The students will then begin to see that their ideas count, and that they can determine what they must do to improve. Conferences are equally as important to the teacher who can discover things about students that may not be apparent from their work alone. Teachers gain important insights about their students' thinking during conferences. The students will be asked how they feel about

a piece of work (a developing criteria), what has been accomplished, how it was done, and what needs to be done next (Kallick, 1992). Teachers can then make instructional decisions based on the outcomes of the conferences.

When parent conferences are scheduled, portfolios should be utilized to enable parents to see what their children's learning is like. The conferences may be initiated by the parents, teacher, student, or significant others. All parties may be present or any combination. (Students may also choose to peer conference.) However, it is important to involve parents before the actual conference takes place. They need to understand the purposes of using portfolios. Everyone involved needs to agree that the conference is an opportunity to advance the development of the learner, as well as a chance to celebrate on the progress already made.

Despite the fact that many parents insist that they want to see letter grades, once they have experienced this alternate way of viewing achievement, they like it. Parents come away from portfolio conferences with a clearer picture of what their child can do when the accumulated work stands as evidence of their child's abilities (De Fina, 1992).

As indicated by the literature, involving students in their own learning is a multi-faceted task. We need to empower them by inviting them into the learning process through cooperative learning, goal-setting, self-evaluation, and conferencing.

## Project Outcomes and Solution Components

As a result of an increased use of goal-setting and alternative assessment activities in conjunction with cooperative learn-

ing strategies and skills, during the period of September 1, 1995 to February 1, 1996, the targeted elementary students will become more actively engaged in their own learning as measured by conferences, teacher/student journal entries, and reviews of student portfolios.

In order to accomplish the project outcomes, the following processes are necessary.

1. Cooperative learning skills will be fostered through direct instruction.
2. Modeling and guided practice will be used to teach goal-setting, establish criteria and rubrics to be used for self-evaluation.
3. Conferences will be utilized as a method for students to engage themselves in realistic self-assessment.

Action Plan for the Intervention

The following steps will be taken to implement the intervention.

I. Cooperative learning skills will be fostered through direct instruction.

A. Who

School A's first grade REI class consists of 29 students. Cooperative learning will be used, and the groups will range in size from two to five students. These groupings will be based on: gender, academic ability, and temperament. The selection may be done by the teacher or by student choice. The groups will exist for the semester or for the length of the specific task.

School B's fifth grade class is composed of 20 students. The class will be arranged in cooperative groups that range in size from two to five students. These groupings will be based on: gender, academic ability and temperament. The selection may be done by the teacher or by student choice. The duration of the groups will be based upon the specific task.

School C's primary special education class is a self-contained class of eight students. The class will be arranged in cooperative learning groups that range in size from two to five students. Group selection may be done by the students or by the teacher based on: academic ability, gender, and temperament. The duration of these groups will be dependent on the specific task.

School C's third through fifth-grade aged class is a self-contained cross-categorical special education class consisting of 12 students. The class will be arranged in cooperative learning groups that will range in size from two to four students. These groupings will be based on: gender, academic ability, and temperament. The selection may be done by the teacher or through student choice. The groups will exist for the semester, or the duration will be based upon the task.

B. Why

The purpose of incorporating cooperative learning structures within the identified classrooms is to increase student participation, to develop personal investment in the task, and to improve learning in the content areas.

C. What

Cooperative groups will be used in the areas of science, math and language arts to teach social skills and academic content. Direct instruction will be employed to develop group interaction, group processing and evaluation. The techniques used include the following: jigsaw, think-pair-share, projects, presentations, graphic organizers, stem statements, and technology. (See glossary for terms.) The students will be asked to demonstrate the following thinking skills: categorization, prediction, analysis, computation, evaluation, sequencing, brain-storming, inventing, classifying, problem-solving, drawing conclusions, and comparing and contrasting.

D. When

The cooperative groups will meet daily from September to February. Depending upon the task, the groups may meet from 10 to 40 minutes for multiple periods in a day.

The following steps will be taken to implement the intervention.

II. Modeling and guided practice will be used to teach goal-setting, establish criteria, and rubrics to be used for self-evaluation.

A. Who

Instruction at Schools A, B, and C may be directed to the entire class, to cooperative groups or to individuals.

B. Why

The purpose of teaching goal-setting and self-evaluation is to engage the learner in reflective practices. Establishing criteria and rubrics, along with the specific indicators (see glossary), will provide the tools for students to take ownership of their learning.

C. What

Modeling and guided practice will be used in science, language arts, and math to teach the students how to set goals, create rubrics and make decisions as to whether or not the established goals were met. An example of the procedure to be used is as follows:

1. read a story (Many fairy tales have characters that have goals.)
2. examine the goals and outcomes of the main character(s)
3. introduce the rubric form and relate it to the outcome and goal of the story characters
4. identify a cooperative group goal (Consider social skill goals.)

5. establish a rubric and specific indicators for that cooperative goal with the class

6. form into the pre-set cooperative groups

7. in cooperative groups the students will share a personal goal-setting experience and compare it to the character in the story

8. while they are working, the groups are to keep in mind the goal that everyone chose

9. using the established rubric, each group will evaluate and reflect on their performance

D. When

During the period from September to February, goal-setting and self-evaluation will be practiced with the entire class, then within cooperative groups as indicated above or in a group conferencing framework, and in conferences with individual students.

The following steps will be taken to implement the intervention.

III. Conferences will be utilized as a method for students to engage themselves in realistic self-assessment

A. Who

Students in all of the named classes may meet individually or in groups with the instructor, parents or peers.

B. Why

Conferences will be used to guide and monitor progress of students as they self-assess.

C. What

Conferences will be used in math, language arts, and science to reinforce positive progress in goal-setting and self-assessment. Individual instruction will be utilized as well as methods of cooperative learning. Additionally, rubrics and other forms of self-assessment such as journals, surveys and interviews will be examined with each student. Portfolios will be compiled of teacher and student selected materials as evidence of the student's growth and progress.

D. When

Conferences will be used weekly, at the completion of a project, or at the student's or teacher's request to ensure appropriate progress. The conferences will last between 5 to 20 minutes or longer as necessary.

Methods of Assessment

In order to assess the effects of the interventions, anecdotal records of teacher observations will be kept, along with surveys, questionnaires, student journals, and portfolios of student work. Additionally, interviews and conferences will be held with students on a regular basis throughout the intervention period.

## Chapter 4
## PROJECT RESULTS

Historical Description of Intervention

The objective of this project was to improve student engagement in their own learning through the increased use of goal-setting and alternative assessment, in conjunction with cooperative learning strategies and skills. At the onset of this project a baseline of behavior was established using the following:

-cooperative learning
-goal-setting and self-assessment
-behavioral checklists
-journals and anecdotal records
-interviews and surveys

Cooperative learning was used to establish familiar goals. Social skills were taught directly, and the children practiced meeting the social skill goal while working in their base or work groups. The skills chosen included listening, cooperation, participation, effort and self-assessment.

Documenting student involvement was accomplished through observation checklists (Appendices A and B) maintained by the teachers, along with notes in journals or anecdotal records. Surveys and interviews with the students and parent questionnaires

(Appendices C, D, E, ) provided additional information relating to perceptions of the students as learners and attitudes about school. Prior to forming cooperative groups, the idea of goals was developed through modeling and establishing daily classroom behavioral goals. Rubrics and the indicators for meeting these goals were established by the teacher and students at this time. At the end of the day, the students were asked to indicate whether the goal was met, and how they rated the class and themselves.

Historical Description of Intervention: School A

To help the students understand the concepts of goals, evaluation, and the use of rubrics and specific indicators, daily classroom goals were set during the class meeting each morning. The rubrics and indicators were also established at this time. At the class meeting at the end of the day, the students indicated with a show of fingers the score they felt the class deserved.

As the students started to understand this method of evaluation, the emphasis shifted from the class to the individual. They were asked to determine how they personally met the goal, again with a show of fingers. The idea of goals was further explored as students read fairy tales and examined the goals of the different characters.

Cooperative learning groups were established in September. The groups had three, occasionally, four students of differing ability levels. The same students worked together most of the time, but the groups changed slightly due to absences of different members. These long-term groups were considered base groups. Short-term work groups were used for activities that lasted for a

short duration. They could consist of three or four members, or they could have only two members if doing a "think-pair-share" activity.

Changes in the base groups occurred throughout October when five students moved away and were replaced during the last two weeks of October by five new students. Each of the new students, according to their records, were considered high-risk. Indeed, two of them moved to yet another community after only eight weeks in the school. The other three students made progress both socially and academically. Despite the changes in the class enrollment and, therefore, the base groups, all of the students in the current base groups bonded and supported each other.

While working in cooperative groups, the students also focused on a social skill goal. They were asked to evaluate their group's performance, as well as their own performance. The assessments were done with a signal, or a show of fingers to duplicate a rubric score, or with a written evaluation form, a sample of which is in Appendix F. Of course, the group scores were more difficult because the group had to come to a consensus.

The roles assigned to cooperative group members were: material person, the one who retrieved and returned work materials; recorder, the one who wrote or drew the groups' ideas; and, reporter, the one who reported the findings or ideas of the group. All members were considered encouragers and were expected to be supportive and positive within the group. Depending on the task or activity, other roles were those of checker and timekeeper. The checker made sure all understood the task and all contributed. The timekeeper helped the group to stay on task and notified the group of the advancing time limit.

At times, the cooperative groups did research, created projects and made presentations. For example, when doing a unit on Native Americans, the groups were asked to choose a tribe to study. They were to learn where and how their tribe lived, to build a model of a typical home for their tribe, and to create an artifact symbolic of their tribe. They used a KWL chart and attribute web (Appendices G and H), to organize the information. Then, they were asked to present their findings and creations. At the end of the unit, each group used the rubric and indicators (see sample in Appendix I) established by the class at the beginning of the unit to do an evaluation of their groups' work.

Because some content areas in this classroom were taught by other teachers, the teacher/researcher observed the students during direct instruction, as well as when they were in cooperative groups. The observation checklist (Appendix A) was used to record skills like participation, following directions and effort.

Along with goal-setting strategies and the use of cooperative groups, individual conferences were held with each student to establish individual writing goals. The students wrote stories, notes, or journal entries daily. The conferences were scheduled on a rotating basis every five to ten days.

Every grading quarter, the students selected a piece of writing for their portfolio. The rationale for each selection and the conference exchanges were recorded as part of the teacher-maintained anecdotal records. The journal writing was also self-evaluated for growth each quarter using a journal writing evaluation form. (Appendix J).

At the start of the intervention, the students and the parents completed the questionnaire or survey. The students were also individually interviewed. This information was used to establish baseline guides to determine perceptions and attitudes toward learning and school. For comparison, the interviews and surveys were repeated at the end of the intervention.

Historical Description of Intervention: School B

Cooperative learning was one method of instruction used at School B. Student groups consisted of four members per group. There were base groups and task groups. Base groups were only used for advisory or non-academic activities. Task groups were used in all academic instruction and changed as the activities changed. Each member in the group had a specific defined role that changed daily. The roles were: getter, retrieves materials; timekeeper, keeps track of time allotted for a given task; and, encourager, boosts morale. Everyone in the group was required to write, but each one used a different colored marker to indicate that all were participating. Random questioning was also employed and tracked. The class was informed that there would be questions after an activity. After approximately one month, students were aware of expectations and understood methods of evaluation.

Prior to each project or test (see samples in Appendices K and L) students set goals for themselves. These goals included the grade they hoped to achieve, the steps they would take to meet their goal, and the importance of doing the project, (which was the learning that was taking place). At the completion of a project, they would self-assess. They would reflect on how well they believed they

accomplished their goals, the most interesting learning that had taken place, and the grade they believed they earned.

The observation checklist (shown in Appendix B) was also used to determine each individual's investment in learning. Seven categories were established to measure investment. Behaviors were recorded with three indicators: a plus sign, a check mark, or a zero. When frequently doing the target behavior, the student received a plus sign. When occasionally doing the behavior, the student received a check mark. When the student was not yet exhibiting the behavior, a zero was given. The checklist was used once a week and five students were targeted per week.

A journal was also kept to document the behaviors. Initially, many entries were made in an attempt to understand and examine each student's behavior.

Student interviews were also an essential part of the intervention. Students shared their concerns, areas of strengths, and areas they wished to improve. Additionally, interviews were administered three times during the school year. Surveys also were used to determine students' investment in school and learning activities. Parents also were surveyed to ascertain their perception of how engaged their child was in learning. Both surveys were then tallied and compared for trends.

The final intervention used at School B was exhibitions. Students created projects using their imaginations. The projects related to different units in science. (See Appendices M and N.) These exhibitions had clear purposes and goals, as well as designs that had to be approved prior to the start of the project.

They shared their creations with the other fifth grade classrooms and staff members.

Historical Description of Intervention: School C

Cooperative learning was used as an instructional technique to teach social skills and subject matter contained in the academic curriculum. Social skills were directly taught while the students were in cooperative learning project groups. The groups consisted of four groups of three to four students. They were established at the beginning of an academic unit and were maintained for the duration of the project. The groups met for four forty-minute sessions per week, during which time specific social skills were directly presented by the teacher and practiced by the students.

The social skills chosen to be presented by the teacher/researcher included: listening, sharing, cooperating, and accepting others' ideas. To reinforce skills, lessons were modified so that cooperative groupings were the instructional strategy used to teach either math, language arts, science or social studies. (A sample lesson emphasizing these skills can be found in Appendix O.) Group observation was recorded by the teacher/researcher through the observation checklist (Appendix A), and through anecdotal records which were completed weekly.

Before cooperative lessons, students were presented with a specific skill and directed to develop a rubric in order to self-assess on both an individual and a group basis. At the completion of the cooperative group lesson, evaluation forms were distributed and completed.

Through fairy tales, nursery rhymes, biographies, and the social studies curriculum, students were instructed in goal-setting activities and were led to discover and evaluate goals. (A sample lesson can be found in Appendix P.)

Because realistic self-assessment is an important component of goal-setting, the teacher/researcher held individual conferences ranging from five minutes to twenty minutes every other week. During these conferences, students restated their individual goals and explained how they rated themselves in accomplishing their goals. The teacher/researcher redirected the evaluation when the self-assessment was extremely unrealistic.

Along with cooperative learning groups, goal-setting activities, and self-assessment, students kept journals and portfolios. Using the journal writing evaluation form, students evaluated their journal writing every other week. Student portfolios were designed for writing, art work, and small projects which students wished to keep and share with their parents. They were encouraged to state a reason why each particular piece they chose was important to them. At least once a month students were given time to reorganize and reevaluate their portfolios. During this time, the teacher/researcher circulated among students to conference on their rationalizations and to share their successes. Students were encouraged to share artifacts with others. This helped to prepare them for the student-directed parent conferences held in the spring.

Presentation and Analysis of Results

For ease in comparing the results of this intervention, the same tools that were used to establish a baseline guide in

September were re-administered to the students and parents upon the completion of the intervention in February. The results are explained school by school in the following pages.

School A

At the beginning of the research, several things were apparent. First, the students were not accustomed to working in cooperative groups and/or having roles. Second, the idea of setting their own goals was foreign to them. Third, the concept of grading themselves created some anxiety.

Though cooperative groups were established the first week, it took eight to twelve weeks for the newly-formed groups to act as a unit, rather than as individuals. The first posters and projects were done with a lot of haggling. Students butted heads for ideas, space and materials. If questioned about the work, a frequent response was, "I don't know, someone else did that." In February, those same groups not only shared materials, but suggested ideas about how to use them. The work areas often overlapped as students sought and/or offered help to others in their group.

The different roles of the group's members were rotated to make the students comfortable in each role. Recording could be done with letters, words or pictures. Everyone soon learned they had to listen to each other so they could decipher and share their group's report if they were chosen as the reporter. The identification of the student with that role was usually left until all the groups had completed the assigned task.

The first group evaluations also created problems for the students. Fingers were held up to indicate a score from one to four,

but it was hard for them to agree on a single score for everyone. It was also hard for them to allow the reporter to be their spokes-person. During the self-evaluations (which were also done with a show of fingers at first), it was evident that some students were unable to see their performance in a realistic way. A few students responded immediately without any thought about the indicators chosen by them and the class.

To assist the students in their own and class evaluations, the class set a daily goal, and each student was required to set a personal goal for the week. At the end of each day, the students considered the class' goal, their own, and what could be done to achieve the goal. Personal goals were written down during conferences with the teacher. Each day, a different group of students individually met with the teacher to go over the goals. The students were asked to consider whether the goal had been met, if they needed to continue working toward their goal, or if they needed a new goal. They soon discovered that this was a way for them to monitor their own progress. The conference was crucial for the students who had difficulty looking at their own goals in a realistic way. It helped them to understand what they could do, and what they needed to do to reach their goal.

Conferences also were held to discuss the students' writing. Journal writing was evaluated with a quarterly self-evaluation form completed during a conference. Additionally, the district required a writing portfolio for each student. A writing piece selected by each student was chosen quarterly. The students explained why they chose the piece during a conference. Qualifying comments about the writing at the start of the year were "I like it," or "It was fun." By

February, many of the former comments changed to more reflective appraisals like, "I liked the setting and/or characters," or "I used a lot of details." The comments were recorded on notes and attached to the writing.

The observation checklist became a valuable tool for the teacher and students. The students were shown the checklist, and the areas being recorded were identified for them. The original plan to use three different marks to record the students' behavior proved to be cumbersome, so a simple dot, (a different color was used for each day of the week), was used to indicate that a specific behavior was observed. The students frequently looked at the checklist to see if they had numerous dots. The children recognized that positive behaviors were the ones recorded by the instructor. Increased participation and cooperation were a direct result of the students' awareness of the teacher's expectations and their own performance. The students eagerly tried to increase the number of dots on the sheet. When a student's behavior interfered with earning any dots, a notation was made about the behavior.

Finally, by comparing the student surveys and interviews, along with the parent questionnaires, from September to February, it was obvious some other changes had occurred in the children's thinking. In February, a greater percentage of parents and students indicated that the students liked school. Also more students now felt discussion of school and school activities were occurring more frequently than in September. While the parents' responses remained the same at 79 percent, the students' responses went from 52 to 72 percent, an increase of 20 percent. This increase brought students' responses into closer alignment with their parents'

responses, an indicator that the students were becoming more thoughtful about what they were doing.

The students' interviews also reflected changes in their awareness of themselves as learners. All of the students were able to define areas of strength and weakness in February. Not one of them said, "I don't know," for any of the questions asked, although that was a common response in September. This was another indicator of the students' increased level of awareness in their abilities and their awareness of what to improve. Had they become more motivated? Yes! Had they become more engaged? Again, yes.

School B

At the onset of the school year, it was apparent students were very comfortable with cooperative grouping. They performed the role (job) assigned, and they took the responsibility seriously. Prior to this year, they had not focused on social skills. This was a new and at times difficult task. Additionally, they were setting personal achievement goals, difficult for them at first, but as the year progressed, they became more comfortable with the process. When asked to self-assess, there was an attitude of disbelief. They couldn't believe the instructor was asking for their opinions. Students were engaged and eagerly participated in cooperative group settings. Group behaviors were tracked, some behaviors did not change significantly (less than ten percent), from September 1995 to February 1996. The behaviors that did not change were: works independently, asks questions, and prioritizes. Some behaviors did change more significantly i.e., participates in discussion rose 12 percent, involved in group work rose 18 percent, listens

to others rose 10 percent. Enthusiasm fluctuated with the assignment.

Correct answers to random questions improved over the course of the year. In fact, correct responses to questions improved 27 percent. Perhaps the questions became easier, or they anticipated being questioned, so they were more attentive. This could be construed as forced engagement and not student initiated.

Goal-setting prior to projects and tests became a very effective way for students to measure their commitment. When students first began goal-setting, they would desire to earn an "A," but have no clear path as to how to accomplish it. Once the project was turned in, or the test completed, they still believed they earned the desired grade even if they didn't work very hard, or if they hadn't studied. As time went on, their goal for an "A" did not change, yet their plan on how to achieve it did. Students asked more questions to clarify the assignment. They were then able to state more clearly milestones they would reach in order to satisfy the requirements. Additionally, they became more honest and reflective when self-assessing. Previously, if they hadn't done a very good job by their own standards, they believed their grade should be a "B+." As time progressed, they admitted to earning "C's" and "D's." (Usually, with that realization they would ask to be allowed to redo the assignment.) The students' reflections were particularly enlightening as to the success of the assignment. Initially, they would ask why they were doing an assignment. As the year progressed, they often understood the big idea and not just isolated facts.

Student interviews revealed students were apprehensive about school, and they most often stated they were good in nonacademic subjects like P.E. and art. When asked what they would like to improve, it was often inconsequential areas like handwriting or talking out. At the time of the last interview, students were feeling confident about specific academic areas, and they were hoping to improve specific skills within a subject.

Surveys also indicated positive growth. In September, ten percent of the students revealed they never wanted to come to school. In February, there were no students who had these feelings. Parents' feelings echoed the feelings of the students.

Students enjoyed exhibitions, as evidenced by one hundred percent attendance on exhibition days. Students took great pride in their work and created invitations to ensure the greatest number of attendees. After an exhibition, students would inquire when they could create the next project.

Students were positively engaged during cooperative learning. They enjoyed the interaction, and they learned from each other. The most beneficial tools to improve engagement were goal-setting and self-assessment. Students became aware of their commitment and the work necessary to achieve their desired results. They became more reflective and more responsible toward their own learning. They were honest with the instructor and themselves when commenting on how well they believed they did.

School C

During the course of this intervention, significant changes were exhibited in a variety of areas. Although a number of students

had previously experienced some cooperative group activities, they were not accustomed to working in long term groups. Base groups of three to four students were established at the beginning of an academic unit and remained together until its completion. A poster listing rules for cooperative groups was discussed before each cooperative group meeting. In September, it was often necessary to remind students of the rules during projects, as students found it difficult to listen to each others' ideas and stay with their groups. By February, students were exhibiting good listening skills and sharing ideas. Groups remained intact through their group evaluation.

At first, roles were assigned by the teacher so that each student was responsible for the task with which he/she felt comfortable. As students began to work as a more cooperative and cohesive unit, roles were rotated to provide everyone with the opportunity to experience and become more comfortable in all cooperative group roles. It was obvious that some roles were preferred, but as the intervention continued, students became eager to try new responsibilities. Some students who had been shy or unmotivated were anxious to be the reporter and perform in front of the whole class.

At the end of each cooperative group session, students completed an individual and group evaluation form. (See Appendix F.) In the beginning, students were eager to find fault with other members of the group, while at the same time, feeling that they, themselves had done a perfect job. As groups continued to work together, students became more realistic about their individual behaviors; some not participating in discussions, others not staying with their groups. This realization began to affect their performance. Group

evaluations became more specific in the areas which needed improvement and group encouragement was frequently demonstrated.

The observation checklist and anecdotal records were other important tools which revealed an increase in participation and involvement. Teachers recorded observations on a weekly basis in such areas as participation, cooperation, effort, and realistic self-assessment. In the fall, some students were not exhibiting these behaviors. Through the use of the observation checklist performances were directly affected. As students became more aware of the teacher's expectations, an increase in participation and cooperation was observed. All behaviors were not necessarily consistent, but an overall increase in frequency was noted. In referring to anecdotal records, the teacher observed students reading more frequently in their free time, completing daily chores without reminders, and expending more time and energy in creative writing assignments. Anecdotal records also revealed more appropriate attitudes, listening skills, and encouraging remarks during cooperative groups and writer's workshops. Many of these observations indicated a greater involvement and appreciation of others' work.

An integral part of the intervention centered around the student-teacher conferences. Conferences were held every other week to discuss student's writing journals and portfolios. As the students became more proficient in evaluation of their journal writing, the evaluation form became more individualized. Students were able to develop their own rubrics for such expectations as capitalization, punctuation, spaces between words, and writing complete sentences. Teacher conferences revealed that students had become realistic about the quality of their completed pieces.

Conferences also revealed (during the course of intervention) that most students had increased their own expectations for their published works.

In past years, teachers often compiled portfolios of students' work to be used as assessment tools and to share with parents at conference time. Portfolios, as a tool of this intervention, were to be a compilation of projects, art work, and writings chosen by the students themselves. Each student selected as many pieces as they wanted, and they were then asked to explain why each piece was chosen. At the start, the reasons stated were often: "I want to keep all of these," "I like it," "It's good," but with no real justification as to its worth to the student. As the year progressed, students became more critical of their selections. Qualifying statements included such comments as: "This tells a lot about the Native American group I studied," "This is what my best handwriting looks like," "This story is really special to me now that my Grandpa died."

Students not only conferenced with teachers, but also with each other, in preparation for parent-student conferences in the spring. This proved to be an extremely motivating activity. Students displayed a high level of involvement, not only in their validation of their own work, but also in social goals such as listening, encouraging, and making constructive comments to their partners (as taught in cooperative groups).

A comparison of September and February student surveys and interviews, with parent questionnaires, revealed inconclusive results. But the overall comparison between the September questionnaire and the survey administered in February indicated a greater percentage of agreement between students and parents. The

comparative survey questions dealing with attendance continued to show a negative correlation. Sixty-two percent of the students responded that they liked to come to school contrasted to the parents' responses of eight percent.

A comparison of student-parent responses dealing with responsibility exhibited a greater percentage of agreement between students and parents in February than it had in September. In some instances, the percentages were exactly the same. This may have been an indicator that students became more aware of their responsibilities and more conscientious about their performances.

A strong correlation was also evident when comparing the February parent questionnaire and student survey, which dealt with discussing and sharing school activities at home. Sixty-two percent of the students agreed with sixty percent of the parents on this issue. This was another indicator that students had become more actively engaged in their learning, and they were eager to share and celebrate their success with their parents.

A comparison of student interviews implied that students had become more aware of their strengths and weaknesses and their abilities as learners. They had become more reflective about their accomplishments and more realistic about the skills needed for future goals.

Before the intervention began, most students had not been given opportunities to set class goals or their own personal objectives, nor were they accustomed to formal self-evaluation of class goals and/or personal goals which had been set for them by others. Often teams of educators had determined short and long term

objectives for students without consulting them or involving them in the process.

At the beginning, students experienced much difficulty in assessing their strengths and weaknesses (as evidenced in the student interviews). Thus, choosing realistic personal objectives, creating self-assessment rubrics, and evaluating objectives were major obstacles.

Some students chose the same goal time after time. Others chose goals which would have been very unlikely to achieve. Much teacher/researcher cueing was needed by students to guide them in realistic self-assessment. Some of the students overestimated, and they responded that they had met their goal when they had not, and others underestimated and responded that they hadn't met their objective when they really had.

Selecting viable class objectives, evaluating them, and reaching a consensus in both selection and evaluation of goals proved to be almost as difficult as choosing and assessing personal goals. Again, the students behaved in the same way they did when selecting personal goals. They either selected the same goal time after time or an unattainable goal. However, some students recognized class weaknesses, and they formulated class goals to correspond with recognized weaknesses.

Goal-setting and self-assessment intervention consisted of modeling (the teacher's personal examples and fictional and non-fictional characters), creation of rubrics, and guided practice. Students were encouraged (via conferencing) to establish personal objectives in either academic and/or social areas and to create rubrics for self-assessment. At first, students needed prompting by

the teacher/researcher. As time passed, students became more adept at recognizing their strengths and conversely, the areas in which they needed improvement. Teacher/researcher cueing became less evident. Students chose practical and obtainable personal goals. Occasionally, personal goals transferred to class goals, and the reverse also occurred.

With guided practice, class goals became easier to identify. At first, some students found fault with their classmates' behaviors, not necessarily realizing they they, themselves, had some of the same behaviors. Each student came to realize that he/she was part of a class group, and that a consensus for a class objective needed to be reached. They also learned (through self-assessment rubrics they had created) that there were varying degrees of behavior connected with a whole class goal, and that some students would not meet the goals to the same extent as others.

Once objectives were selected, self-assessment of whether or not goals were attained also proved to be difficult. The creation of evaluative rubrics became an integral part of the intervention process. Students formulated rubrics to help them decide whether or not the class goal or personal goal had been achieved. They also stated why they had or had not met their goal.

Conferences throughout and at the end of the intervention period revealed that the majority of students were now able to set viable and attainable personal and class goals. They were now able (through the creation of rubrics) to self-assess realistically whether or not they had met their objectives, and why they felt they had or had not.

Conclusions and Recommendations: School A

The strategies used in this intervention, (cooperative learning, goal-setting, and self-assessment) created an environment that was industrious, involved, cheerful and thoughtful. The use of cooperative groups had long been a part of the teacher's tools. The key to the differences observed in these students was the additional use of consistent goal-setting and self-assessment opportunities. These were the ingredients missing from past years of teaching.

The students were introduced to cooperative group roles and social skills, along with goal-setting and assessment, in a systematic manner. This provided them with the tools that they needed to understand that they were in charge of their own success. The changes, growth, and development that occurred were evident after several weeks. The students became more involved. They were more reflective during conferences. Their goals became practical and measurable. Their self-assessments became more realistic with each passing week.

The feelings of responsibility for a cooperative group to succeed increased through the group and individual assessments. They learned how to develop criteria and rubrics to use in evaluating whether or not their group made it to the top. Then, they worked hard to make sure their group was successful.

Students were not the only winners. The teacher learned to be a more efficient observer. The observation checklist was a helpful, practical tool to use to monitor the behaviors that would indicate an increase in engagement. The teacher also became more reflective, comparing past years of teaching with this year, in order to plan for the future. The next years of teaching will include the

strategies of this intervention. To get children involved, they need to be taught to set their own goals and to recognize their own growth as a success story that they can repeat day after day, year after year.

Conclusions and Recommendations: School B

The class eagerly participated in cooperative learning. They enjoyed group success, requested to work in groups often, and rarely complained about students with whom they were grouped. Teamwork was vital, valued, and learned early in the school year.

Goal-setting and self-assessing were tangible tools with which to measure student growth. This was apparent, not only to the teacher, but also to the students. As they became more aware of their strengths and weaknesses, they learned to capitalize on their strengths and compensate for their weaknesses. Their own knowledge of their learning and processing styles was invaluable. These two methods, goal-setting and self-assessment, helped create thoughtful, motivated students. They believed goals were attainable, and they possessed the power to accomplish them. Giving them the power created an open door to engagement.

Having the ability to lead students to more reflection and engagement should be a goal all teachers strive to attain. Empowering the students, empowers the instructor. There is less time spent trying to "hook" the learner and more time spent on learning. Students don't need to "buy into" the activity or project. Instead, they need to figure out how to get what they want out of the assignment.

Both instructor and student benefit from the student being more invested, consequently, more engaged.

Conclusions and Recommendations: School C

Based on the presentation and analysis of the data on improving student engagement in learning activities, students exhibited a significantly higher level of involvement. The social skills learned during cooperative learning sessions appeared to have made students more aware of their responsibilities as learners and members of a group. Students enjoyed cooperative group lessons and displayed satisfaction in the success of completing group projects. They looked forward to working with different classmates and becoming a member of a newly-formed group. This was an invaluable lesson for the future. Life is a group lesson, whereby the ability to work and get along with other people is vital. In many job situations, an individual employee is part of a team. Cooperative learning groups provide the opportunity to practice these social skills for transfer.

Student-teacher conferences on journal writing and portfolios provided the time and opportunity to self-assess. Students became more reflective and aware of their stages of growth. This, in turn, brought about motivation for improvement. Students who, at the beginning of the year, were satisfied with copying two to three sentences from a model, now developed their writing into two to three paragraphs of a short story.

Goal-setting also led to motivation for improvement in both social and academic learning activities. As students learned to set goals realistically and to achieve them, they became more actively engaged in their entire school program. The teachers realized that

they needed to actively participate in the goal-setting during the intervention by selecting their own teaching goals and then self-assessing whether or not the goals were attained. When students observed the teachers modeling and setting goals for themselves, the students discovered that selecting goals was a life-long process. This discovery gave meaning to their own goal-setting experiences. It was the impetus needed to transfer school experiences to life skills. When learning has meaning, there is transfer. When students develop the ability to set goals and realize those goals, they become more motivated. They become aware of the control they have on their future.

The tools used in this intervention should become a part of today's classrooms, but it is important to note pitfalls which can occur. For example, the observation checklist (as it was first designed) became cumbersome and time consuming. There were too many ratings and too many similar areas to observe. Each teacher must find record-keeping forms which work for him or her. Whatever tools are used, time, convenience, and practicality should be a high priority.

Then there was the issue of time. Conferencing for journals and portfolios required a lot of time, as conferencing had to be scheduled on a daily basis in order to give each student his or her allotted time. Goal-setting also was an important component, but useless if time had not been set aside to assess whether or not those goals had been met.

Even with drawbacks such as these, every attempt must be made to engage and motivate students. The most significant reason is to help them recognize that they have the ability and power to

learn and grow, not just now, but throughout their lifetimes. The strategies incorporated into this project created the spark necessary for student engagement and motivation. The teachers were committed to the use of cooperative learning, goal-setting , and self-assessment which created an environment of cooperation, satisfaction, and responsibility.

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## GLOSSARY

cooperative groups - structured small groups with assigned roles and responsibilities for each member

graphic organizers - graphs that organize ideas to help students understand content relationships and make thinking skills visible, i.e. web, KWL chart, and many others.

jigsaw - a task structured like a puzzle, where each student in a group gets a part to master and to teach the others until all learn the whole

KWL chart - a graphic organizer used to identify known information, predict the unknown, and evaluate the learning

portfolio - a collection of student work used to document growth and development

rubric - scoring device that assigns points or value to a continuum of performance levels

specific indicators - characteristics to be used as benchmarks for measuring growth and development on a continuum or scale

stem statement - a sentence starter to be completed by each student that will cause the student to reflect on learning

think-pair-share - informal pairing of students who share ideas and concepts

web - a graphic organizer used to analyze attributes of a topic

# APPENDICES

Appendix A

# OBSERVATION CHECKLIST – 1.

Teacher: _____ Class: _____ Date: _____

Target Skills: _____

Ratings:
✱ = Frequently
✓ = Sometimes
○ = Not Yet

| NAMES OF STUDENTS | participates | completes assignment | follows directions cooperates | displays effort | displays initiative | uses time wisely | displays realistic self-assessment | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| 1. | | | | | | | | |
| 2. | | | | | | | | |
| 3. | | | | | | | | |
| 4. | | | | | | | | |
| 5. | | | | | | | | |
| 6. | | | | | | | | |
| 7. | | | | | | | | |
| 8. | | | | | | | | |
| 9. | | | | | | | | |
| 10. | | | | | | | | |
| 11. | | | | | | | | |
| 12. | | | | | | | | |
| 13. | | | | | | | | |
| 14. | | | | | | | | |
| 15. | | | | | | | | |
| 16. | | | | | | | | |
| 17. | | | | | | | | |
| 18. | | | | | | | | |
| 19. | | | | | | | | |
| 20. | | | | | | | | |
| 21. | | | | | | | | |
| 22. | | | | | | | | |
| 23. | | | | | | | | |
| 24. | | | | | | | | |
| 25. | | | | | | | | |
| 26. | | | | | | | | |
| 27. | | | | | | | | |
| 28. | | | | | | | | |
| 29. | | | | | | | | |
| 30. | | | | | | | | |

# OBSERVATION CHECKLIST- 2.

Teacher: _____ Class: 5th Date: _____

Target Skills: _____

Ratings:
◆ = Frequently
✓ = Sometimes
○ = Not Yet

| NAMES OF STUDENTS | participates in discussion | involved in group work | works independently | asks questions | listens to others | prioritizes | enthused | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| 1. | | | | | | | | |
| 2. | | | | | | | | |
| 3. | | | | | | | | |
| 4. | | | | | | | | |
| 5. | | | | | | | | |
| 6. | | | | | | | | |
| 7. | | | | | | | | |
| 8. | | | | | | | | |
| 9. | | | | | | | | |
| 10. | | | | | | | | |
| 11. | | | | | | | | |
| 12. | | | | | | | | |
| 13. | | | | | | | | |
| 14. | | | | | | | | |
| 15. | | | | | | | | |
| 16. | | | | | | | | |
| 17. | | | | | | | | |
| 18. | | | | | | | | |
| 19. | | | | | | | | |
| 20. | | | | | | | | |
| 21. | | | | | | | | |
| 22. | | | | | | | | |
| 23. | | | | | | | | |
| 24. | | | | | | | | |
| 25. | | | | | | | | |
| 26. | | | | | | | | |
| 27. | | | | | | | | |
| 28. | | | | | | | | |
| 29. | | | | | | | | |
| 30. | | | | | | | | |

## Appendix C

Name_____ Date_____

STUDENT SURVEY

1. I like to come to school.

   Always Often Sometimes Never

2. I use my time wisely.

   Always Often Sometimes Never

3. I follow directions

   Always Often Sometimes Never

4. I read in my free time.

   Always Often Sometimes Never

5. I try to write new words.

   Always Often Sometimes Never

6. I try to use new words.

   Always Often Sometimes Never

7. I ask for help with homework.

   Always Often Sometimes Never

8. I bring my papers home.

   Always Often Sometimes Never

9. I ask for help with school projects.

   Always Often Sometimes Never

10. I discuss and share school activities.

    Always Often Sometimes Never

11. I ask to go to the library in town.

    Always Often Sometimes Never

12. I have daily chores.

    Always Often Sometimes Never

13. I do chores without reminders.

    Always Often Sometimes Never



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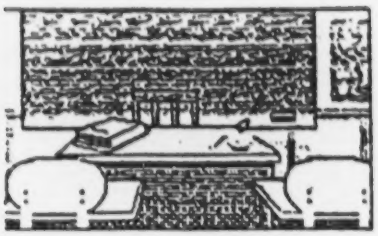
Appendix D



STUDENT INTERVIEW

1. At school, the things I do well._____

_____

_____

2. What I want to learn this year. _____

_____

3. One thing I'm having trouble with... _____

_____

4. One thing I want to improve... _____

_____

5. Things I like to learn about. _____

_____

# Appendix E

Name _____ Date _____

PARENT QUESTIONNAIRE

1. My child likes to come to school.

   Always Often Sometimes Never

2. My child uses time wisely.

   Always Often Sometimes Never

3. My child follows directions.

   Always Often Sometimes Never

4. My child reads in his/her free time.

   Always Often Sometimes Never

5. My child tries to write new words.

   Always Often Sometimes Never

6. My child tries to expand his/her vocabulary.

   Always Often Sometimes Never

7. My child asks for help with homework.

   Always Often Sometimes Never

8. My child routinely brings home schoolwork.

   Always Often Sometimes Never

9. My child asks for help with school projects.

   Always Often Sometimes Never

10. My child likes to discuss and share school activities.

    Always Often Sometimes Never

11. My child asks to go to the library.

    Always Often Sometimes Never

12. My child has daily chores.

    Always Often Sometimes Never

13. My child does chores without reminders.

    Always Often Sometimes Never



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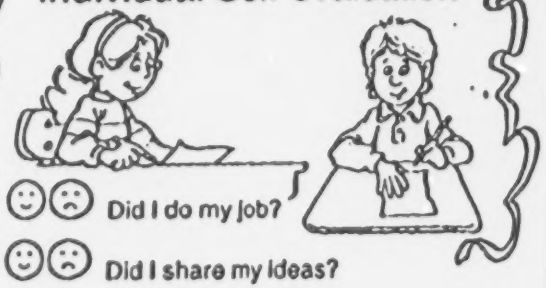
## Individual Self-evaluation



Did I do my job?

Did I share my ideas?

Did I listen when others were talking?

Did I help others in my group?

What can I do to help our group next time we meet ?

_____

_____

_____

## Group Self-evaluation

Did we do our jobs?

Did we work together to solve problems?

Did we work quietly together?

Did we stay together until all the jobs were done?

How can we work better as a group?

_____

_____

_____

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KWL

NATIVE AMERICANS

| What We Know | What We Want to Find Out | What We Learned |
|---|---|---|
| Homes:<br>straw. wood. sticks.<br>cloth. bricks. rags<br>teepees<br>round tops<br><br>Transportation:<br>walked<br>horses<br>boats<br><br>Food Tools:<br>meat, fish<br>knives<br>arrows<br>spears<br>hands<br>hatchets | Where did they get the stuff for building?<br><br>How did they learn how to build?<br><br>Where did they go?<br>Did they build boats from logs?<br><br>How did they make a living?<br>How did they cook?<br>Why did they fight with people? | They used the stuff they had clay. skins. poles. bark. mu grasses<br>Wicklups<br>Wigwams<br>Longhouses<br>Families taught each other<br><br>ran. used snowshoes. canoes bullboats. dog sleds. travois kayaks long boats<br><br>They stayed mostly in one ar but traveled to get food<br><br>They hunted. fished. trapped. and farmed<br><br>squash. beans. berries.corn. buffalo. deer. cows. coyote.<br><br>They cooked over open fires<br>They fought to protect their families |

Form
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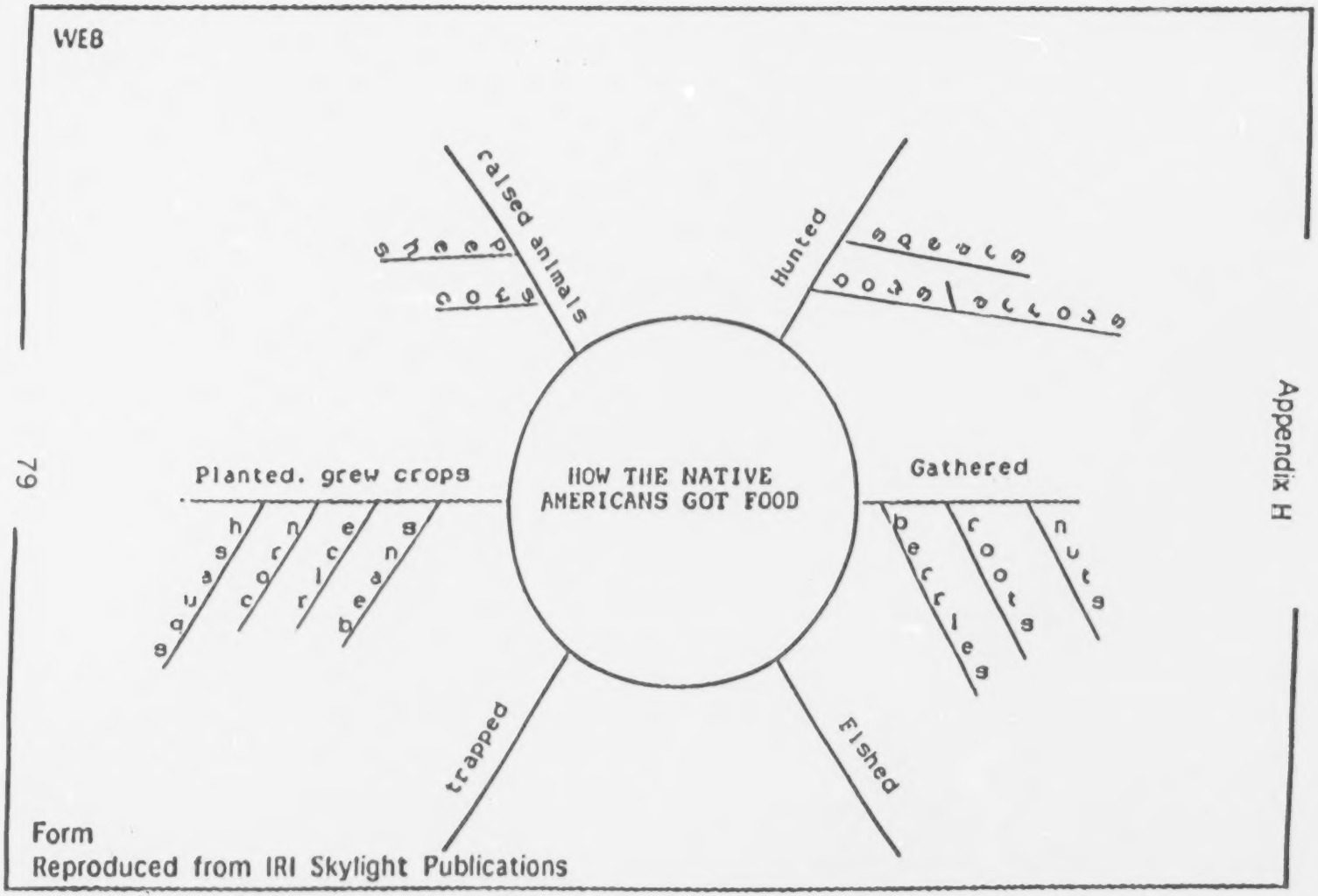
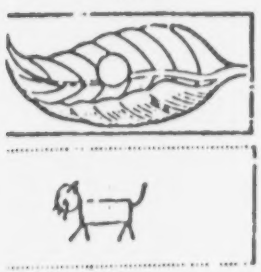
Appendix G


WEB
HOW THE NATIVE AMERICANS GOT FOOD
raised animals
sheep
cows
Hunted
Gathered
berries
roots
nuts
Planted. grew crops
squash
corn
beans
trapped
Fished
Form
Reproduced from IRI Skylight Publications

# Journal Writing

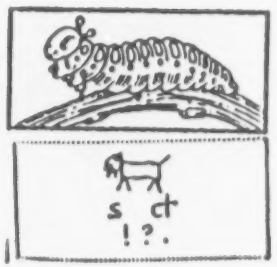
Author

I write my ideas.



- I draw pictures

- I draw pictures.
- I pretend write.




- I draw pictures.
- I write words the way they sound.
- I use punctuation.

- I draw pictures.
- I write words the way they sound.
- I write some words correctly.
- I put spaces between my words.
- I use punctuation.

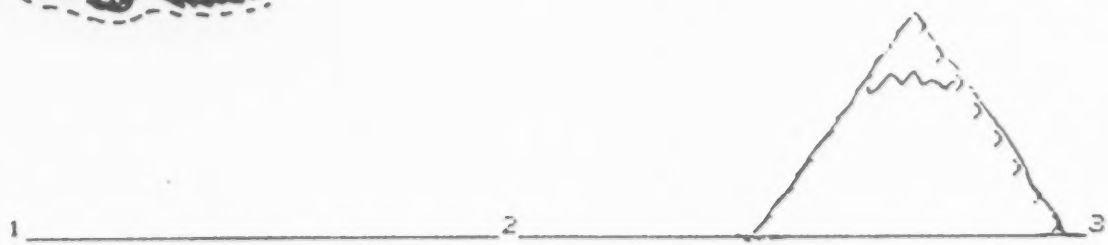
Circle the picture that describes your journal writing.

Key: Black - November
Red - January
Green - April
Blue - May

I do my own best!

Source Unknown

## NATIVE AMERICANS RUBRIC




| | | |
|---|---|---|
| Did not finish projects | Finished 1 project | Finished All projects |
| Not listening | Listening Often | Always Listening |
| Working alone | Mostly Working with the group | Always Working with they group |
| Fooling around | Mostly Stayed on on the job | Stayed on the job |
| Unhelpful, not sharing | Sometimes Helpful & sharing | Helpful, Sharing |

(The Native Americans felt that nature and animals were special. The eagle is very special to them. When you reach the goals on this rubric. It will be like soaring like an eagle to the top of the mountain.)

Appendix K

Name_____

Date_____

PROJECT ASSIGNMENT _____

1. The assignment was turned in complete. yes no
2. I followed directions. yes no
3. I proofread for accuracy. yes no
4. What I did well. _____

_____

_____

5. What I could have done better. _____

_____

_____

6. Grade I think I should receive. _____

Appendix L

**Name**_____

**Date**_____

**QUIZ or TEST**

1. **I studied the night before. yes no**
2. **I understood the material. yes no**
3. **I asked questions when I didn't understand the information presented in class. yes no**
4. **I felt confident taking the exam. yes no**
5. **Grade I think I should receive.** _____

# Appendix M

## UNLEASH YOUR IMAGINATION ON YOUR COMPOUND MACHINE PROJECT

Students will:

1. Design a compound machine at school working individually or with a partner.
   - The design will be approved by Mrs. Wojtysiak AND their parents.
   - The machine must contain at least 2 simple machines and they must not be the same type.

2. Develop a name and a purpose for your compound machine.
   - The purpose may be real (toothpaste squeezer)
   - or fanciful (ping pong ball tester)
   - We will work on the purpose and the name at school.

3. Build the machine at home.
   - Students may use raw materials or found objects, kitchen or workshop tools, toys or store bought parts. Lego parts are ok as long as the design is your own.
   - Simple machines only use muscle power.
   - Please no larger than three feet square.
   - Machines should need no more than 5 minutes of tinkering at school to be operational.

4. Bring Machines to school _____ for our INVENTOR'S FAIR
   - Machines need to be taken home or disposed of by Friday, Oct. 27.

## NOTE TO PARENTS

The purpose of this project is to encourage creative manipulation of ideas, not to test students' and parents' patience and power tool expertise. The machine should work but does not have to look polished. They should look like they were built by a 10 year old.

This project will be graded on a pass/fail basis. However, students will self assess using a letter grade and explain their rationale. Please do not feel obligated to do any of the construction unless tools are involved which require parental supervision or use. If you feel your student is unable to complete this project independently, we will redesign it so they can. Please keep me informed.

Mrs. Wojtysiak

**COMPOUND MACHINE PROJECT**

**This assignment is due _____**

**Your compound machine will be graded on: originality and how well it works.**

**The specifics:**

**include atleast 2 simple machines**

**must perform a function (job)**

**present a "blueprint" of your machine**

**demonstrate your invention to a panel of judges**

**may build alone or with a partner**

**The purpose of this assignment is not to frustrate your parents but to enhance YOUR knowledge of simple machines and how they work!**

## Make Your Own

LESSON NAME: North American Environmental Lodging
TARGETED INTELLIGENCE: Visual/Spatial
SUPPORTING INTELLIGENCES: Bodily Kinesthetic / Interpersonal
THINKING SKILLS: Problem Solving / Analyzing
SOCIAL SKILLS: Listening, Cooperating
CONTENT FOCUS: Social Studies
MATERIALS: Construction paper, glue, markers, birch bark, pretzels, Indian designs on pattern
TASK FOCUS:
PRODUCT: Artifact depicting typical lodging of Indian group studied
PROBLEM: Selecting correct materials and completing construction of artifact representative of Indian Lodging for Plains, woodland, Pueblo and Northwest Indian Groups.
ACTIVITY:
Base groups were established for this project. Roles were assigned to avoid frustration. A model was provided for each group. Group decided on materials needed and materials manager selected items. Each member performs 1 step of construction according to directions for dwelling. i.e Plains: ① color pattern ② Glue pattern to construction paper ③ Glue pretzels in places marked ④ Glue sides together to form tent shape of tepee of Plains Indians.

REFLECTIONS:
1. Did you complete the step you were responsible for?
2. Did you cooperate with group
3. Did group complete desired project

Each student completed evaluation form for both group and individual assessment.

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## Appendix P

### Sample Fairy Tale Lesson

Teacher defines "goal" and shares a personal example of a goal setting experience (i.e. learning to ski) -- teacher responds to any questions or comments students may have

Teacher: "I'm going to share a book with you. Listen and think about the goals of the characters as I read."

Teacher shares a book of "The Three Billy Goats Gruff."

Teacher presents these questions in a class discussion.

Troll:
1. What was the goal of the troll?
2. Did he meet his goal?
3. Why not?

3 Billy Goats:
1. What were the goals of the billy goats?
2. Did they all have the same goal?
3. Did they all meet their goal?
4. Why? How?

Teacher shares rubric form and relates to story.

| 1 | 2 | 3 |
|---|---|---|
| did not cross bridge | fell on bridge | crossed bridge |
| ate no goats | ate some goats | ate all the goats |

Class selects cooperative group goal of listening

Rubric - Listening

| 1 | 2 | 3 |
|---|---|---|
| no eye contact | some eye contact | good eye contact |
| talking | some talking | no talking |
| drew no picture | drew some things | drew most things |

Students meet in preset cooperative groups of 4 students each. They number off and roles of timekeeper, encourager, recorder, and materials manager are assigned.

In groups, students take turns (round-robin) sharing a personal goal setting experience and compare either to the troll or one of the billy goats. Each student draws a picture of the goal setting experience which was shared by the classmate to his/her right. During this time, teacher circulates among groups emphasizing listening if necessary.

Groups evaluate performance using the previously established rubric. Once a concensus is reached, the recorders (using different colors) circle their group's performance on the rubric which has been written on the chalkboard or paper.



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